

FIELD MANUAL  
No. 10-500-2  
TECHNICAL ORDER  
No. 13C7-1-5

HEADQUARTERS  
DEPARTMENT OF THE ARMY  
DEPARTMENT OF THE AIR FORCE  
Washington, DC, 1 November 1990

AIRDROP OF SUPPLIES AND EQUIPMENT:  
RIGGING AIRDROP PLATFORMS

TABLE OF CONTENTS

	Paragraph	Page
PREFACE		v
CHAPTER 1	AIRDROP INFORMATION	
	Responsibilities	1-1 1-1
	Types and Method of Airdrop	1-2 1-1
	Accompanying Loads	1-3 1-2
	Items and Loads Dropped in Cold Climates	1-4 1-5
	Safety Precautions	1-5 1-5
	Center of Balance	1-6 1-5
	Knots	1-7 1-7
	Emergency Aft Restraint	1-8 1-8
	Maximum Rigged Weight	1-9 1-8
CHAPTER 2	RIGGING INFORMATION	
Section I	AIRDROP PLATFORMS	
	Use	2-1 2-1
	Platform Limitations for Aircraft	2-2 2-3
	Type V Airdrop Platform	2-3 2-3
	Type II Modular Airdrop Platform	2-4 2-3
	LAPE Modular Airdrop Platform	2-5 2-3
Section II	AIRDROP SUPPLIES AND EQUIPMENT	
	Commonly Used Items	2-6 2-4
	Inspection and Strength of Items	2-7 2-4
Section III	SUSPENSION SLINGS	
	Cargo Slings	2-8 2-10
	Requirements	2-9 2-11

DISTRIBUTION RESTRICTION: Distribution authorized to US government agencies only to protect technical or operational information from automatic dissemination under the International Exchange Program or by other means. The determination was made on 30 April 1991. Other requests for this document will be referred to the Airborne and Field Services Department, USA Quartermaster Center and School, 1010 Shop Road, Fort Lee, VA 23801-1502.

DESTRUCTION NOTICE: Destroy by any method that will prevent disclosure of contents or reconstruction of the document.

\*This manual supersedes FM 10-500-2/TO 13C7-1-5, 29 May 1984.

		Paragraph	Page
Section IV	LASHINGS		
	Use	2-10	2-13
	Components and Strengths	2-11	2-13
Section V	CARGO PARACHUTES		
	Use	2-12	2-16
	Types	2-13	2-16
	Riser Extensions	2-14	2-18
Section VI	PARACHUTE RESTRAINT SYSTEM		
	Use	2-15	2-19
	Description	2-16	2-19
Section VII	EXTRACTION SYSTEMS		
	Use	2-17	2-20
	Components	2-18	2-20
	Operation	2-19	2-24
Section VIII	RELEASE ASSEMBLIES		
	Use	2-20	2-25
	Description	2-21	2-25
	Inspection and Maintenance	2-22	2-25
	Operation	2-23	2-25
Section IX	EXTRACTION PARACHUTES AND SLING/EXTRACTION LINE PANEL		
	Cargo Extraction Parachute	2-24	2-31
	Inspection, Maintenance, and Packing	2-25	2-31
	Requirements	2-26	2-31
	Sling/Extraction Line Panel	2-27	2-34
Section X	TRANSPORTATION OF RIGGED LOADS		
	Responsibilities	2-28	2-36
	Typical Loading and Transporting Equipment	2-29	2-36
CHAPTER 3	PROCEDURAL INFORMATION		
Section I	PLATFORM AND HONEYCOMB PREPARATION		
	Inspecting Platforms	3-1	3-1
	Suspending Platform Loads	3-2	3-1
	Preparing Platforms	3-3	3-8
	Building Honeycomb Stacks	3-4	3-11
	Placing Honeycomb Stacks	3-5	3-12
	Heavy Drop Derigging System (HDDS)	3-5.1	3-12.1
Section II	ACCOMPANYING LOAD AND DROP ITEMS		
	Stowing Accompanying Loads	3-6	3-13
	Preparing Drop Items	3-7	3-13
	Covering Load	3-8	3-13

		Paragraph	Page
Section III	SUSPENSION SLINGS AND LASHINGS		
	Attaching Slings	3-9	3-14
	Safetying Slings	3-10	3-14
	Fitting D-Rings	3-11	3-16
	Lashing Load	3-12	3-16
	Safetying Load Binder Handles	3-13	3-19
	Forming 30-Foot, 45-Foot, or Greater Length Tie-down Strap	3-14	3-20
Section IV	CARGO PARACHUTES		
	Riser Extensions	3-15	3-21
	Stowing Riser extensions	3-16	3-27
	Stowing Cargo Parachutes	3-17	3-27
	Using Deployment Lines	3-18	3-27
	Restraining One Parachute	3-19	3-35
	Restraining Two to Eight Parachutes	3-20	3-36
Section V	EXTRACTION SYSTEMS		
	Extraction Force Transfer Coupling (Platform)	3-21	3-55
	Extraction Force Transfer Coupling	3-22	3-62
	Static Line/Connector Strap Extraction System	3-23	3-76
	Low-Altitude Parachute-Extraction	3-24	3-91
	Parachute Extraction System for LAPE	3-25	3-101
Section VI	RELEASE ASSEMBLIES		
	M-1 Cargo Parachute Release	3-26	3-127
	M-2 Cargo Parachute Release	3-27	3-134
	Parachute Risers Attached to the Parachute Release	3-28	3-136
	The 5,000-Pound-Capacity Cargo Parachute Release	3-29	3-138
Section VII	EXTRACTION PARACHUTES		
	Extraction Lines	3-30	3-145
	C-130 Aircraft	3-31	3-145
	C-141 Aircraft	3-32	3-151
	Extraction Parachute Clusters	3-33	3-155
	C-5 Aircraft	3-33.1	3-156.1
	MC-130 Aircraft	3-33.2	3-156.9
Section VIII	LOAD MARKING AND INSPECTION		
	Marking Rigged Load	3-34	3-157
	Types of Inspections	3-35	3-157
	Emergency Aft Restraint Requirement for Platform-Extracted Loads Rigged on a Type V Platform	3-36	3-158

CHAPTER 4	60K LOW-VELOCITY AIRDROP SYSTEM	Paragraph	Page
	Description of 60K System	4-1	4-1
	Platforms for 60K Airdrop System	4-2	4-3
	Suspension Slings for 60K Airdrop System	4-3	4-6
	Cargo Parachutes	4-4	4-9
	Preparing Riser Extensions for Attachment to Release	4-5	4-11
	Connecting Parachute Riser Extensions	4-6	4-13
	60K Release	4-7	4-15
	60K Extraction Force Transfer Coupling (EFTC)	4-8	4-17
	On the Aircraft	4-9	4-20
	Derigging	4-10	4-20
GLOSSARY		Glossary-1	
REFERENCES		References-1	